

METHOD FOR ISCHEMIA DETECTION BY IMPLANTABLE CARDIAC DEVICE

Cross-Reference to Related Application(s)

5 This application is a continuation-in-part of U.S. Patent Application Serial
Nos. 09/999,255, filed on October 31, 2001, ^{now USPA 6,937,901} and 10/436,876, filed May 12, 2003, ^{now USPN 7,069,070} the
specifications of which are incorporated herein by reference

Field of the Invention

10 This invention pertains to systems and methods for cardiac monitoring and
rhythm management. In particular, the invention relates to implantable cardiac devices
and their methods of operation.

Background

15 Implantable cardiac devices are devices that monitor cardiac function and may
also provide electrical stimulation to selected chambers of the heart in order to treat
disorders of cardiac rhythm. Such cardiac devices include pacemakers, implantable
cardioverter/defibrillators, cardiac resynchronization devices, and implantable cardiac
monitoring devices. A pacemaker is a cardiac rhythm management device that paces
the heart with timed pacing pulses. The term "pacemaker" as used herein, however,
should be taken to mean both pacemakers and any device with a pacing functionality,
20 such as an implantable cardioverter/defibrillator with a pacemaker incorporated
therein.

25 The most common condition for which pacemakers are used is the treatment of
bradycardia where the intrinsic heart rate is too slow. The two most common causes
of ventricular bradycardia are AV block and sick sinus syndrome. Permanent pacing
for bradycardia is indicated in patients with symptomatic bradycardia of any type as
long as it is likely to be permanent or recurrent and is not associated with a transient
condition from which the patient may recover. In chronotropically competent patients
(i.e., those patients whose atrial rhythm is responsive to metabolic demand) in need of
ventricular pacing, atrial triggered modes such as DDD or VDD are desirable because